

the elytral intervals in the latter is sometimes very fine and a good magnification is necessary. Judging by their descriptions there is little to choose between these two species except their different habits. Greater differences might be noted if the descriptions of both species were not so abbreviated.

BIBLIOGRAPHY OF GROUP I-B.

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A. troglodytes Hubbard, Insect Life, 1894, p. 312.
A. campestris Blatchley, Canadian Ent., Vol. 44, 1912, p. 330.
A. canadensis, sp. nov.

NEW OR LITTLE-KNOWN CRANE-FLIES FROM
TROPICAL AMERICA (TIPULIDÆ, DIPTERA).

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The majority of the new species described herein as new were secured by Mr. Herbert S. Parish along the Amazon River. The new *Teucholabis* was secured by Prof. Hine in Guatemala, and sent to me through the kindness of Dr. Kennedy. The new species are preserved in the collection of the author.

Teucholabis pabulatoria, sp. n.

Size very small (wing under 4 mm.); head gray; general coloration reddish yellow; pleura with an appressed gray pubescence; wings hyaline, the stigma small and ill-defined; Sc_1 ending just beyond the origin of R_s ; R_{2+3} in alignment with R_s ; cell R_3 very wide at the wing-margin.

Male.—Length 3.6 mm.; wing 3.5 mm.

Female.—Length 3.8 mm.; wing 3.7 mm.

Rostrum reddish brown; palpi dark brown. Antennæ with the scapal segments dark brown, sparsely pruinose; flagellum broken. Head light gray.

Pronotum reddish yellow. Mesonotum reddish brown, the præscutum without distinct stripes. Pleura reddish yellow, the ventral sclerites with a heavy, grayish white pubescence. Halteres light brown, the large knobs dark brown. Legs with the coxæ reddish, sparsely pruinose; trochanters dull yellow; femora yellow, the tips broadly dark brownish black; tibiæ brownish yellow, the tips narrowly dark brown; metatarsi light brown, the apical third blackened; remainder of the tarsi black. Wings hyaline, the stigma barely indicated, brown; veins dark brown. The microscopic trichiae on the wing-disk are here larger than is usual in the genus. Venation: Sc short, Sc_1 ending a short distance beyond the origin of R_s , Sc_2 a short distance from the tip of Sc_1 , located before the origin of the sector; R_1 beyond r very short, the tip pale; R_s long, gently arcuated, in alignment with and subequal to R_{2+3} ; r in alignment with the deflection of R_{4+5} ; cell R_3 very wide at the wing-margin; R_{4+5} bending strongly to the wing-tip; inner end of cell $1st\ M_2$ lying a short distance proximad of the inner ends of cells R_3 and R_4 ; basal deflection of M_{1+2} and the outer deflection of M_3 almost obliterated; basal deflection of Cu_1 a short distance beyond the fork of M .

Abdomen brown, the sternites paler. Male hypopygium with the pleurites

short. the tips projecting far beyond the very simple chitinized, pleural appendages which are situated on the inner face; these appendages are two in number, one appearing as a slender, cylindrical, chitinized arm, the other appendage appears as a flattened plate which runs out into a small, chitinized point. From the hypopygium projects a long, slender rod, pale, the tip enlarged and slightly blackened. The homologies of this rod cannot be told from the material at hand.

Habitat.—Guatemala.

Holotype.—♂, Gualan, January 13, 1905, (J. S. Hine).

Allotype.—♀.

The types were taken from the mouth of a female damsel-fly (*Helarina tricolor* Burm.) by Dr. C. H. Kennedy. By the writer's key to the American species of *Teucholabis* (Trans. Amer. Ent. Soc., Vol. 40, pp. 235-239; 1914), *Teucholabis pabulatoria* will run to *T. jocosa* Alexander from which it is readily told by its small size, the very different coloration of the thorax, and the venation.

Erioptera (Mesocyphona) cladophora, sp. n.

Generally similar to *E. annulipes* Williston; tibiae with four brown bands; *2nd Anal* vein strongly sinuous and with a spur before its tip.

Male.—Length 2.8 mm.; wing 2.8 mm.

Female.—Length 3.5 mm.; wing 3.5-3.6 mm.

Generally similar to *E. annulipes*, differing as follows:

Most of the femora with four brown bands; tibiae with four narrow brown bands, alternating with four subequal white areas; metatarsi with the base and apex dark brown; tarsal segments three to five and the end of the second dark brown. Wings with a faint brownish tinge; large whitish subhyaline areas occupy the ends of all the cells along the wing-margin; similar white areas in the ends of cells *R* and *M* and before the large spur of the *2nd Anal* vein in cell *1st A*; small brown spots at the ends of all the longitudinal veins; a narrow, dark brown seam along the cord; veins dark brown. Venation: Generally as in *E. annulipes* but the *2nd Anal* vein is very remarkably distinct; very strongly bisinuous, almost as in the genera *Helobia* and *Symplectomorpha*, before the last curve with a strong spur that juts into cell *1st A*, this spur directed cephalad and basad, in some specimens almost attaining vein *1st A* and thus appearing as a supernumerary cross-vein in cell *1st A* (as in the genus *Discobola*); this spur is surrounded by a dark seam. Male hypopygium with two long, slender pleural appendages, the outermost bifid almost to the base and thus appearing as two separate appendages; inner appendage longest and more strongly curved than in the others; gonapophyses appearing as a long, slender, slightly-incurved rod with the apex blackened.

Habitat.—Brazil.

Holotype.—♂, Manaus, October 31, 1919, (H. S. Parish).

Allotopotype.—♀, November 4, 1919.

Paratopotypes.—11 ♂'s ♀'s, October 22-31, 1919.

Sigmatomera amazonica Westwood.

1881 *Sigmatomera Amazonica*. Westwood, Trans. Ent. Soc. London, part 3, pp. 366, 367; pl. 17. Fig. 3.

The female sex of this beautiful crane-fly has never been described. One specimen was taken at Flores, Brazil, November 12, 1919, by Mr. H. S. Parish and may be described as allotypic.

Allotype.—♀, length 11.5 mm.; wing 11.8 mm.

Rostrum and palpi very small, dark brown. Front obscure yellow. Antennæ black, the flagellar segments subcylindrical, feebly constricted beyond mid-length. Head moderately large, the vertex very narrow between the eyes and here with a sparse gray bloom; remainder of the head dark brownish black.

Thorax shiny black, the dorso-pleural membranes obscure yellow. Legs with the coxæ shiny black, the fore coxæ rufous apically; trochanters rufous; femora rufous, narrowly blackened basally and with the tips broadly black; tibiæ black, the bases a little paler; tarsi brownish black. Wings as in the male; cell 1st M_2 open by the atrophy of the outer deflection of M_3 .

Abdomen reddish, the seventh and succeeding segments black. Ovipositor with the tergal valves rather short and slender arising from a long basal shield, the apex dilated into a compressed tridentate blade, the ventral tooth larger and more flattened; from near the base of the tergal valves on the outer side, a pencil of long, curved, yellow bristles that are directed caudad and laterad; sternal valves of the ovipositor longer than the tergal valves, originating opposite the base of the dorsal shield, the tips acute.

Subgenus *Polymerodes*, subg. n.

Characters as in *Polymera*, s.s., but the tibial spurs lacking. Venation reduced, cell M_1 lacking and cell M_3 small, not longer than its petiole.

Type of the subgenus.—*Polymera (Polymerodes) parishii*, sp. n.

This new group is necessitated for the reception of three small species of *Polymera* in which the tibial spurs are quite lacking. In the typical subgenus, the tibial spurs are long and visible even with a hand-lens. It is very difficult to classify such forms since the females invariably run out to the genus *Erioptera* by means of the existing keys. The males have the beautiful bi-nodose antennæ of the typical subgenus. The species, besides the type, that are referable to this subgenus are *P. conjuncta* Alexander and *P. conjunctoides* Alexander.

The three known species may be separated by means of the appended key:

1. Size larger (wing of the male 4 mm. or over); antennæ conspicuously annulated, the base and apex of each flagellar segment light yellow, the remainder of the segment black; thoracic pleura with a very broad, black stripe that almost covers the entire region..... *parishii*, sp. n.
- Size small (wing of the male less than 4 mm.); antennæ uniformly black; pleura uniformly pale or with a narrow dark stripe..... 2.
2. Thoracic pleura with a narrow but distinct black longitudinal stripe..... *conjunctoides* Alexander.
- Thoracic pleura without a distinct dark stripe, the pleura being approximately concolorous with the dorsum..... *conjuncta* Alexander.

Polymera (Polymerodes) parishii, sp. n.

Flagellar segments black, annulated with yellow; thoracic pleura largely black.

Male.—Length about 4 mm.; wing 4–4.5 mm.

Generally similar to *P. conjuncta* Alexander, differing as follows:

Size larger. Antennal flagellum with the individual segments distinctly annulated, black with the base narrowly, the apex more broadly, light yellow; each flagellar segment is binodose, the nodes with very long, outspreading verticils. The thoracic pleura has a very broad, brownish black stripe that extends to the abdomen; thoracic sternum also brownish black, the space between this and the pleura only slightly paler. Wings with a strong brown tinge; vein *Sc* shorter; R_{2+3} shorter than that section of R_1 beyond r . Abdomen black.

Habitat.—Brazil.

Holotype.—♂, Manaus, November 4, 1919, (H. S. Parish).

Paratopotype.—A badly-broken ♂, October 31, 1919.

***Eriocera amazonicola*, sp. n.**

General coloration orange-yellow; antennal flagellum brownish black, the scutal lobes and posterior half of the mesonotal præscutum brownish; wings yellow, narrowly cross-banded and longitudinally streaked with brown, this including a narrow apical margin.

Male.—Wing 9.3 mm.

Female.—Length 12 mm.; wing 10.8 mm.

Frontal prolongation of the head reddish brown; palpi obscure brownish yellow. Antennæ with the scape fiery orange; flagellum dark brownish black, only the extreme base of the first flagellar segment brighter. Head fiery orange, the frontal tubercle moderately large and with a slight, impressed, median line.

Mesonotum obscure yellow, the præscutum behind and the scutal lobes more brownish; scutellum and postnotum more orange-yellow. Pleura yellow. Halteres yellow, the knobs dark brown. Legs with the coxæ and trochanters yellow; femora obscure yellow, the tips narrowly dark brown; tibiæ obscure brownish testaceous, the tips very narrowly darker brown; tarsi dark brown. Wings with a strong yellowish tinge, most conspicuous in the costal region and at the wing-base; anal cells more grayish; conspicuous brown seams at the origin of R_s , extending to beyond midlength of the vein; along the cord, extending as a narrow cross-band from the stigma to the posterior margin of the wing; a narrow seam around the wing-tip; veins R_{4+5} , M_3 , Cu_1 , the outer end of cell $1st M_2$, Cu and $2nd A$ narrowly margined with brown; veins light yellow, darkened in the brown areas. Venation: R_s long; r just beyond the fork of R_{2+3} ; inner ends of cells R_5 and $1st M_2$ in oblique alignment; cell $1st M_2$ rather small, sub-rectangular, shorter than the veins beyond it; basal deflection of Cu_1 just beyond the fork of M .

Abdomen with the tergites fiery orange, segments five and six darker basally; sternites orange-yellow. Ovipositor with the valves elongate, chitinated.

Habitat.—Brazil.

Holotype.—♀, Manaus, November 4, 1919, (H. S. Parish).

Allotype.—♂, Flores, November 12, 1919.

The male specimen is in poor condition, having been badly eaten by ants. The hypopygium is of the *Eriocera*-type but the penis-guard is very long and exerted, somewhat as in *E. longistyla* Alexander.